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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/556,064

10/23/2006

Hiroshi Ota

2005_1749A

6072

52349

7590

02/13/2009

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EXAMINER

PHAN, THIEM D

ART UNIT

PAPER NUMBER

3729

MAIL DATE

DELIVERY MODE

02/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/556,064	OTA ET AL.	
	Examiner	Art Unit	
	THIEM PHAN	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-37 is/are pending in the application.
- 4a) Of the above claim(s) 20-23 and 26-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/08/05, 6/17/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicants' response to the Restriction Requirement, filed on 11/17/08 is acknowledged.

The Restriction mailed on 10/31/08 has been carefully reviewed and is held to be proper. Applicants did not distinctly and specifically point out any logical error in the Restriction Requirement. Therefore, due to the lack of traversal on the merits, applicants' election of Group II, Claims 24 and 25, has been treated as an election without traverse.

Accordingly, Claims 20-23 and 26-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Groups, there being no allowable generic or linking claim. The Restriction filed on 10/31/08 is hereby **made Final**.

Applicants are required to cancel these nonelected claims (20-23 and 26-37) or to take other appropriate action.

An Office Action on the merits of Claims 24 and 25 now follows.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hidese (US 6,606,790) with Prior Publication Data (US 2002/0053134 on 05/09/02).

Regarding claim 24, Hidese teaches a component mounting apparatus comprising:

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- a supplying unit (Fig. 1, 5) configured to supply a component;
- a head (Fig. 1, 9) configured to have at least two nozzle rows (Fig. 2, 12) aligned in a Y direction orthogonal to an X direction, each of which comprises at least one nozzle arranged in the X direction and configured to take out the component supplied from the supplying unit and to convey the component;
- a circuit board holding unit (Fig. 1, 2) configured to hold a circuit board (Fig. 1, 3) on which the component conveyed by the head is mounted; and
- an inspection unit (Fig. 1, 10), which is disposed on a moving path of the head from the supplying unit to the circuit board holding unit, configured to inspect a hold posture of the component held by the nozzle,
- the inspection unit comprising:
 - one sensor for posture inspection or camera (Fig. 2, 17) arranged independently for respective nozzle rows of the nozzles arranged on the head; and
 - one lighting unit to emit light from underneath (Col. 5, lines 48-51) shared between the sensors, arranged for all nozzle rows and configured to irradiate light beam to the head at a time of posture inspection, the lighting unit having an entrance port (Fig. 2, 10; Col. 4, lines 37-40) of optical information for taking an image of the component held by the nozzle.

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Regarding claim 25, Hidese teaches that the centers of fields of view of the respective sensors (Fig. 1, 17; col. 7, lines 54-60) are arranged to be shifted in the X direction in correlation with to the transfer head as well as in the Y direction for calibration.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phan Thiem/
Primary Examiner, Art Unit 3729

February 11, 2009